**Speed, Distance, Time Worksheet Answer Key**

1. 120km
2. 8 hours
3. 90km/h
4. 9.4m/s
5. 5km/h
6. 48km/h
7. Yes, it travelled at 96km/h
8. 1083mph
9. 3.33m/s
10. 0.13m/s
11. 36km
12. No, he arrived at 18:40 (6:40)
13. a = 4.05 m/s/s

|  |  |  |
| --- | --- | --- |
| Given: Initial speed = 0 (rest) Time = 5.21 seconds  Distance = 110m | **Need to find:** Acceleration | **Which Formula to use?**  A = final speed – initial speed  Time |

Procedure: You have the initial speed and the time but are missing the final speed. You need to find this first. Use the formula of Speed = distance/time [110m /5.21 s] to determine the final speed (21.11m/s) of the car. Now you can use the formula for acceleration.

**Substitute this problem for #14 – Answer will be given on Wednesday.**

A glider starts from rest and accelerates for 45 seconds. The final speed of the glider is 372 km/hour. Find the average acceleration of the glider.